

APPARATUS AND METHOD FOR AN OFFSET-CORRECTING SENSE AMPLIFIER

ABSTRACT OF THE INVENTION

An apparatus and method for a sensing circuit for
5 cancelling an offset voltage. Specifically, in one
embodiment, a CMOS inverter amplifier amplifies an input
signal present at an input node. A resistive feedback
circuit is coupled to the CMOS inverter amplifier for
cancelling an offset voltage that is associated with the CMOS
10 inverter amplifier. This is accomplished by biasing the CMOS
inverter amplifier to its threshold voltage. A bias circuit
is coupled to the resistive feedback circuit for biasing
MOSFET transistors in the resistive feedback circuit at a
subthreshold conduction region. As such, the resistive
15 feedback circuit presents a high impedance to the input node.
A clamping circuit, coupled to the resistive feedback
circuit, maintains operation of the transistors in the
resistive feedback circuit in the subthreshold conduction
region.